On t-Motifs
Taelman, Lenny

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2007

Link to publication in University of Groningen/UMCG research database

Citation for published version (APA):

Copyright
Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the “Taverne” license. More information can be found on the University of Groningen website: https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment.

Take-down policy
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): http://www.rug.nl/research/portal. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.
# Contents

Avant-propos - 5

Contents - 3

Introduction 1

1 Effective \( t \)-Motifs: a Motivated Definition 7
   1.1 Galois Representations 7
   1.2 Effective \( t \)-Motifs 12
   1.3 Example: Drinfeld Modules 15

2 Duality and \( t \)-Motifs 17
   2.1 Internal Hom 17
   2.2 \( t \)-Motifs 18
   2.3 Isogenies 22
   2.4 Summary 24

3 Tannakian Aspects 25
   3.1 Fibre Functors 25
   3.2 An Analytic Construction 26

4 Constant \( t \)-Motifs 31
   4.1 Constant \( t \)-Motifs 31
   4.2 The Connected Components of \( \Gamma \) 33

5 Interior \( t \)-Motifs 37
   5.1 Definitions & Statement of the Theorem 37
### b Hilbert 90 and Other Vanishing Theorems
- **b.1 Galois Cohomology of GL(n)**: 87
- **b.2 Some Variants in Positive Characteristic**: 89

### c Tensor Categories
- **c.1 Linear Categories**: 93
- **c.2 Linear Tensor Categories**: 94
- **c.3 Tannakian Categories**: 95

### Bibliography
- **97**

### Samenvatting
- **103**